

MUREX LOTORIUM LINNAEUS, 1758 (MOLLUSCA,
GASTROPODA): REQUEST FOR VALIDATION IN ITS
ACCUSTOMED SENSE UNDER THE PLENARY POWERS.
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All taxonomists working on recent Indo-Pacific Mollusca are familiar with a large, bizarre, orange and black shell known by the name *Cymatium lotorium* (Linnaeus, 1758). While preparing a catalogue of species of the family Cymatidae, the writer was forced to the conclusion that the name *Murex lotorium* Linnaeus, 1758, does not refer to this species but is a synonym of *Murex pileare* Linnaeus, 1758. The name *lotorium* has been long and consistently used in the sense of *Cymatium lotorium* of authors, and the trivial name *Cymatium pileare* is even better known and correctly used for another species of *Cymatium* (*sensu lato*). As there is no well-known name that could be used in place of *lotorium*, an application is here made to the Commission to validate the name *lotorium* in its accustomed sense.

2. There are two ways in which taxonomists can usefully determine the identity of species erected by Linnaeus. The presence in Linnaeus' collection, housed by the Linnean Society of London, of a labelled specimen bearing a number corresponding to that of the species in the 10th edition of *Systema Naturae* fixes identity quite clearly, and such specimens are available for designation as lectotypes of Linnaeus' species. Dodge (1957 : 133) did not mention a specimen of *Cymatium lotorium* of authors in Linnaeus' collection, and Dance (1967 : 21) included *Murex lotorium* in a list of species now missing from Linnaeus' collection. Thus this method of determination cannot be used.

3. The other objective method is to refer to the figures cited by Linnaeus, try to recognise the species they represent, and designate a figure as the type (which constitutes designation of the figured specimen as lectotype of Linnaeus' species). Some authors (notably Hanley, 1855 and Dodge, 1957) have used a third method, and tried to interpret the brief Latin descriptions given by Linnaeus. These authors frequently arrived at subjective or patently incorrect conclusions, and it seems best to avoid this method unless the other two are not applicable.

4. Linnaeus (1758 : 749) cited only one figure of *Murex lotorium*: d'Argenville, 1742, *L'Histoire Naturelle . . . Éclaircie . . . la Lithologie et la Conchyliologie . . .*, Pl. 13, fig. M. This figure (personal observation) is clearly of *Cymatium pileare* of authors, = *Murex pileare* Linnaeus, 1758, erected on the same page as *Murex lotorium*. Thus by strict application of the Code, *Murex lotorium* Linnaeus, 1758 and *Murex pileare* Linnaeus, 1758 are synonyms of equal status. In order to preserve the name *Murex pileare* for the species for which it has long been applied, the author, as first reviser, here selects *Murex pileare* Linnaeus as the name to be used for the taxon described by Linnaeus (1758 : 749) under the names *Murex lotorium* and *Murex pileare*.

5. The only available name for *Cymatium lotorium* of authors, not of Linnaeus, appears to be *Triton distortum* Lamarck, 1816. Apparently this name has not been used since its introduction, and thus qualifies for designation by the Commission as a *nomen oblitum*. Most post-Linnaean authors and all authors after Reeve (1844 : pl. 6, fig. 19) have used the name *lotorium* for the large orange and black species figured by Reeve, and none have regarded it as a synonym of *Murex pileare*. The very lack of well-known synonyms of *Triton distortum* Lamarck testifies to the consistent usage of the name *lotorium* for the species, as almost all Linnaean Cymatiidae have had complex nomenclatural histories and their names have many synonyms. At present the name *lotorium* is used perfectly consistently in the sense of *Cymatium lotorium* by authors, and although the latest authors (Emerson and Old, 1963 : 4) had some doubts about the validity of the name, they continued to use it. Institution of another name in the place of *lotorium* would be a nomenclatural upset that would take years to become stabilised.

6. Under the present Code, the only specimen that could be designated as lectotype of *Murex lotorium* Linnaeus is the original of the d'Argenville figure, which has not been traced and may be no longer in existence. To conserve the name *lotorium* in its accustomed sense it seems necessary for the Commission to exercise its plenary powers to suspend the application of the Code to this case, and to direct that *Murex lotorium* Linnaeus should be interpreted by reference to a clearly designated, well-figured specimen of *Cymatium lotorium* of authors.

Reeve (1844 : Pl. 6, fig. 19b) published a large, clear, scientifically accurate, coloured illustration of *Cymatium lotorium* of authors under the name *Triton lotorium* Linnaeus variety β . Correspondence with Dr. A. M. Bidder of Cambridge University and Mr. N. Tebble of the British Museum (Natural History) has established that the figure numbers 19a and 19b on Reeve's Pl. 6 are transposed, and that the original of Pl. 6, fig. 19b (to which the caption to Pl. 6, 19a refers) is in the Cuming Collection in the British Museum (Natural History), having the register-number 1967696. It is housed in an institution where it is readily available, and has been figured in colour in a publication that is available in most large zoological libraries. It is considered to be the best reference specimen for *Murex lotorium* Linnaeus.

Therefore, in the interests of stability of nomenclature, the Commission is asked:

(1) to exercise its plenary powers to direct that the specific name *lotorium* Linnaeus, 1758 (as published in the binomen *Murex lotorium*) should apply to the species known as *Cymatium lotorium* (Linnaeus, 1758), and should be interpreted by reference to the specimen figured as *Triton lotorium* by Reeve, 1844, *Conchologia Iconica* 2, *Triton*, Pl. 6, fig. 19b, now lodged in the British Museum (Natural History) and bearing the register-number 1967696;

(2) to place the specific name *lotorium* Linnaeus, 1758, as published in the binomen *Murex lotorium*, interpreted as under (1) above, on the Official List of Specific Names in Zoology.

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